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EXAMINER

MAY, ROBERT J

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/501,867  
Filing Date: July 20, 2004  
Appellant(s): O'BRIEN ET AL.

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Stanley C. Spooner  
For Appellant

**EXAMINER'S ANSWER**

**MAILED**

APR 24 2007

**GROUP 2800**

This is in response to the appeal brief filed December 27, 2006 appealing from the Office action mailed October 12, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Gray (US Pat 3,984,673). Gray discloses the reflective element 18 as being between the light source 16 and the cover 10 and angled with respect to the cover 10 and the reflective element for reflecting a portion of the emitted infrared radiation away from the light cover and substantially away from the light source 16.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Carlson.

Regarding Claims 1 and 7, Gray discloses in Figure 1, a cover 10 including a reflective element 18 angled with respect to the cover 10 for reflecting a portion of said emitted infrared radiation away from said cover and substantially away from said light source.

Gray fails to disclose the cover as comprising an aircraft exterior light cover.

Carlson discloses a lighting system which diverts or suppresses infrared radiation away from the lights so as to avoid detection by conventional weapon systems (Col 1, lines 20-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the light cover of Gray comprising an aircraft exterior light cover so as to divert the infrared radiation away from the light source so as to avoid detection by conventional weapon systems as taught by Carlson.

Regarding Claim 2, the reflective element 18 of Gray is construed to be an infrared reject filter.

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Regarding Claim 3, Gray discloses the reflective element 18 to be a dichroic hot mirror.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray and Carlson as applied to Claim 1 and further in view of Bamber (US Pat 5,017,327).

Gray fails to disclose the housing as comprising a synthetic polycarbonate material.

Bamber discloses in Figure 1 a housing 11 advantageously made from a high temperature polycarbonate which would have been known to one of ordinary skill in the art be cheap to manufacture, plentiful and light weight and is explicitly disclosed by Bamber to be temperature resistant (Col 4, lines 6-8).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the housing of Gray with the polycarbonate housing of Bamber because it is a cheap plentiful material that is heat resistant.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray, Carlson and Bamber as applied to Claim 4 and further in view of Gagnon (US Pat 3,650,808).

Gray fails to disclose a scratchproof coating on the cover.

Gagnon discloses polycarbonate surfaces as having a hard, acetone-resistant and mar-resistant coating on articles having a polycarbonate surface (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the scratch proof coating of Gagnon on the polycarbonate cover of Gray so that the surface is scratch proof and mar free.

**(10) Response to Argument**

A. The prior art does not disclose an aircraft exterior light cover which includes "a reflective element angled with respect to said light cover"

B. The Examiner fails to provide any "reason" or "motivation" for combining references

C. The Carlson reference would actually lead one of ordinary skill in the art away from the claimed combination of elements

The appellant asserts that the Gray patent has nothing to do with aircraft or contains any suggestion with or solution to problems with aircraft external light covers and therefore asserts that there is no suggestion that anything disclosed in Gray could even be adapted for an aircraft light cover. The appellant goes on to state that because Carlson teaches a different solution to reduce IR radiation that Carlson therefore teaches away from using a reflective element to reduce IR radiation as claimed. While, the Examiner concedes that Gray does not disclose a suggestion or solution to problems specifically for aircraft external light covers or that Gray is used as a light cover for an aircraft for that matter, Carlson is used to show that it would have been known to one of ordinary skill in the art that one would be motivated to use an infrared diversion mechanism for a light on an aircraft because many weapon systems take advantage of the infrared characteristics of airplanes and it is the lighting systems of

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aircrafts that are the source of this infrared radiation (Col 1, lines 20-31). And one of ordinary skill in the art would have been motivated to look to Gray to use the solution disclosed by Gray.

Regarding Claims 4-5, the appellant asserts that Bamber has nothing to do with aircrafts or aircraft exterior light covers or a reflective element angled with respect to the aircraft exterior light cover. While the Examiner concedes that Bamber does not disclose use with aircrafts in particular, Bamber is used to show that it would have been obvious to one of ordinary skill in the art to use a polycarbonate material for a cover because it would have been cheap to manufacture and light weight.

The appellant asserts that Gagnon has nothing to do with an aircraft exterior light cover or a light cover which includes "a reflective element angled with respect to the light cover." The Examiner concedes that Gagnon fails to explicitly disclose a use for an aircraft cover or light cover. However, Gagnon is used to show that it would have been obvious to one of ordinary skill in the art to use a scratchproof coating on a polycarbonate cover for improving the wear resistance of the polycarbonate surface.

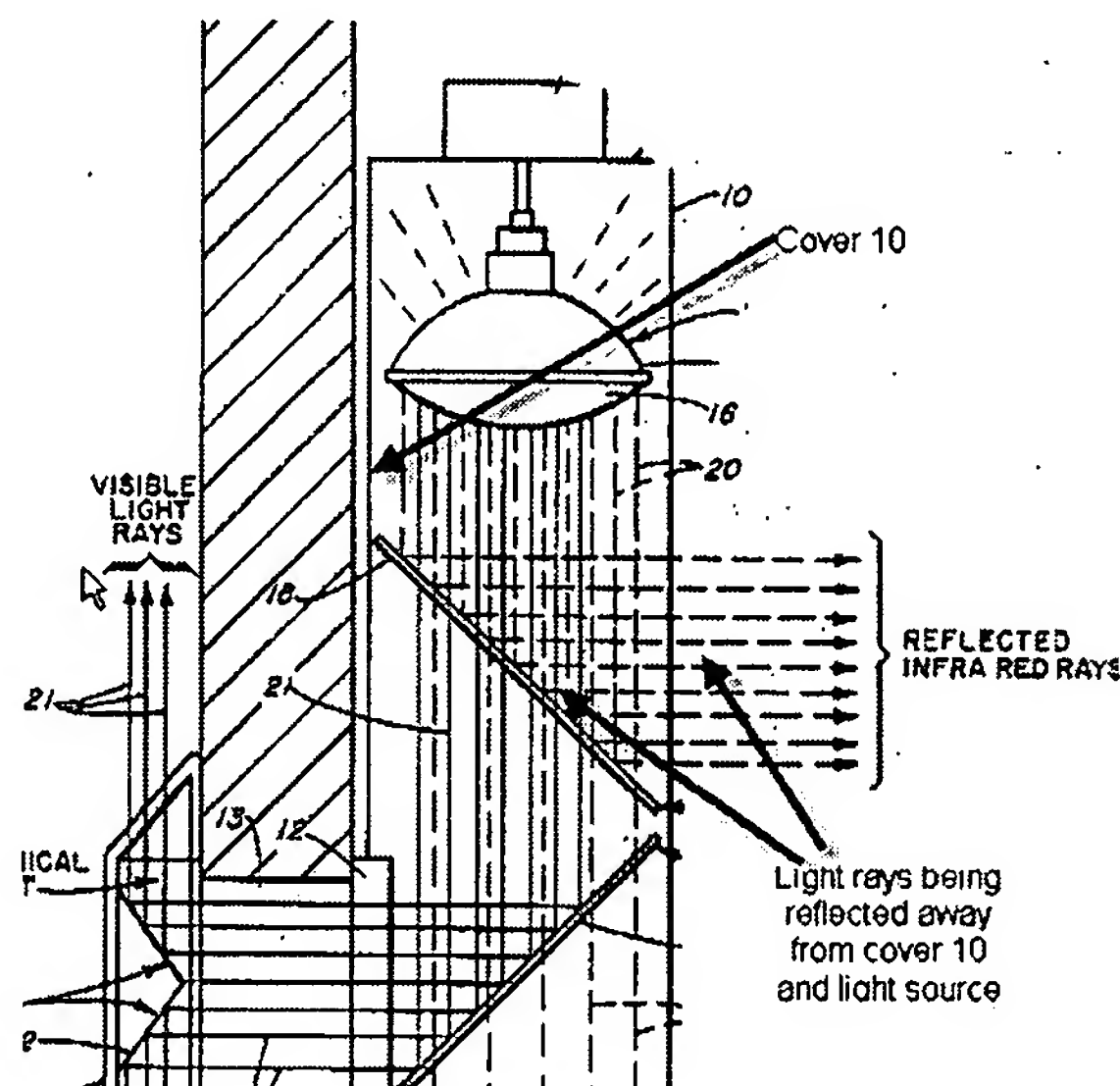
Furthermore it appears that the appellant is trying to show nonobviousness by attacking the references individually. However, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The appellant further asserts that even if the above references were combined, they would not disclose the inventive combination of "an aircraft exterior light cover"



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including "a reflective element" where the reflective element is "angled with respect to said light cover" in order to reflect heat away from both the light cover and the light source as set forth in independent Claim 1 or claims 2-7 dependent thereon. The Examiner disagrees with this argument because Gray does disclose in Figure 1 the heat as being reflected away from both the light cover and light source 16.



D. The Gray reference does not anticipate the subject matter of claim 9

Regarding Claim 9, the appellant asserts that Gray fails to teach a light cover that is transparent as and therefore Gray fails to read on claim 9. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., light cover being transparent to visible light) are not recited in the rejected claim. Although the claims are interpreted in

light of the specification, limitations from the specification are not read into the claims.

See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding Claim 9, the appellant asserts that Gray does not teach a light cover that is placed over the light source. The Examiner disagrees because the light cover 10 of Gray is seen to be placed over the light source 16 because the cover 10 surrounds and covers and is therefore placed over the light source 16. Although the method of achieving a particular structure (i.e. placing the cover over the light source) may impart a structure or structural relationship to an apparatus, in this particular case the structural relationship of the cover to the light source as taught by Gray is seen to be equivalent to that which is recited in Claim 9.

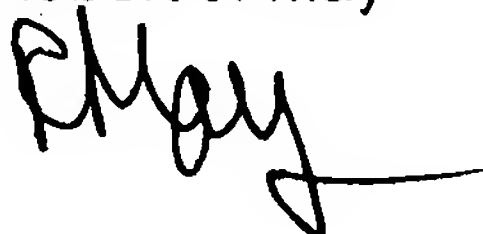
**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Robert J. May



Conferees:

David Blum



Jong Lee

